December 22, 2016

Testing of Cantapeta Creek Bridge on ND 1806 completed today

Today, the North Dakota Department of Transportation (NDDOT) with the help of North Dakota Highway Patrol, Morton County Sheriff's Department, Standing Rock Sioux Tribe and Bureau of Indian Affairs, completed additional testing of the Cantapeta Creek Bridge (Backwater Bridge) on ND Highway 1806 north of Cannon Ball in ongoing efforts to open the roadway. The bridge has been closed since late October due to fires on the bridge, potentially damaging it.

"Today we were able to successfully conduct testing of the Cantapeta Creek Bridge as a first step in opening the bridge and roadway to traffic," said Grant Levi, NDDOT Director. "We appreciate the partnerships with law enforcement and state and tribal leaders to complete this testing while weather conditions allowed."

The inspection today consisted of:

- Removing the top layer of asphalt from a portion of the bridge.
- Taking core samples from areas which were exposed to the highest heat.
- Patching areas where the testing was completed.

The core samples will be tested to determine if the high heat of the fires compromised the structural integrity of the bridge. The bridge is a unique design consisting of concrete box beams that are the support structure and the deck of the bridge, directly supporting the traffic loads. The box beams lie beneath a two-inch asphalt layer. The thickness of the top of the concrete box is five inches. The box beams get their strength through prestressing strands that run the length of the beam. If the concrete box beams were damaged by the fire, the structural integrity of the bridge may be compromised which would require the NDDOT to complete repairs before the bridge could be opened.

The NDDOT took several core samples from the bridge today and is sending the samples to an out-of-state lab that specializes in evaluating concrete cores that have been exposed to high temperatures. The results of the tests could take up to 30 days at which time an update on the bridge condition and an estimate of opening of the bridge will be given.

Live video from the bridge inspection is available at: http://www.dot.nd.gov/bwb.htm or https://video.nest.com/live/MpUwOo6Ggf.

Background:
A team conducted a visual inspection of the Cantapeta Creek Bridge November 1 and determined that additional testing was needed. Security of the area has been a concern and law enforcement has indicated that the area was not secure, therefore further testing was put on hold.

The Cantapeta Creek Bridge was originally a county bridge built in 1963. The bridge became part of the state system in 1971.

Attachments included: bridge drawings and photos of core samples and fire damage.